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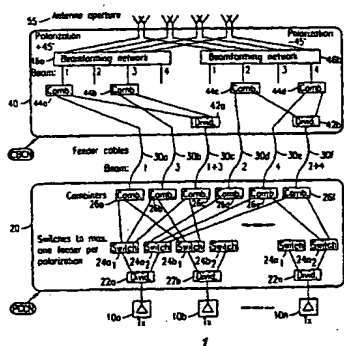
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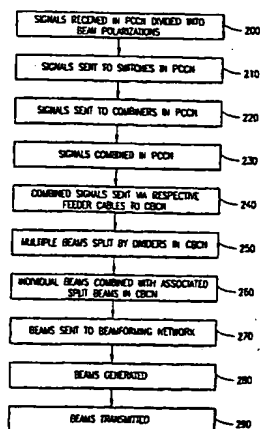
— with international search report

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR SIMULTANEOUS TRANSMISSION OF SIGNALS IN MULTIPLE BEAMS WITHOUT FEEDER CABLE COHERENCY



(57) Abstract: A telecommunications system and method is disclosed for allowing a base station to simultaneously transmit signal in several beams (1, 2, 3, 4) of a multi-beam antenna configuration. Antenna pattern control is maintained by employing orthogonal polarization orientation for every other beam (1, 2, 3, 4). For example, the two orthogonal polarization directions can be approximately linear polarization slanted $\pm 45^\circ$. To be able to transmit simultaneously in an arbitrary combination of more than one beam (1, 2, 3, 4), the BS antenna array includes a separate feeder cable (30c, 30f) for each combination of beams (1, 2, 3, 4) corresponding to a particular polarization, from one feeder (30) per beam (1, 2, 3, 4) to one feeder (30) with all beams (1, 2, 3, 4) of that polarization.





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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01Q25/00 H01Q21/24 H01Q3/26 H04Q7/36 H04B7/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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